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(12) United States Patent

Proctor

(54) SYSTEM AND METHOD FOR COORDINATION OF WIRELESS MAINTENANCE CHANNEL POWER CONTROL

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This patent is subject to a terminal dis-

claimer.

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(56) References Cited

U.S. PATENT DOCUMENTS

5,696,766 A 12/1997 Yeung et al. 5,715,521 A 2/1998 Fukasawa et al. (Continued)

FOREIGN PATENT DOCUMENTS

EP 1 017 187 7/2000 EP 1 039 657 9/2000 (Continued)

OTHER PUBLICATIONS

Association of Radio Industries and Business (ARIB), "Specification of Air-Interface for 3G Mobile System," vol. 3, Ver. 1.0, Issued Dec. 1997, Revised Jan. 1999.

(Continued)

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(57) ABSTRACT

In a wireless communication system, there are several wireless channels used for communication between users and a base station. Channel characteristics may be defined by whether a channel is carrying traffic data and the timing of the channel transmissions with respect to channels not carrying traffic data. Different power levels between channels carrying traffic data or not may be defined and individual power levels of each channel may be amended based on individual power level command responses.

27 Claims, 6 Drawing Sheets

